

Thank you for the opportunity to comment on the IBOC system and its impact on standard AM broadcasting. As a Canadian, my concerns are as follows: 1. Adjacent channel interference - Canadian AM stations will be continuing to broadcast with a 10.2 kHz audio bandwidth, pursuant to the NSRC standard. This is fully compatible with the AMAX standard, and presents no adverse difficulty with pre-AMAX radio receivers. My understanding is that the implementation of the IBOC system in the USA will result in significant interference to Canadian Border stations by day. In addition, if IBOC is used at night, this interference will spread over virtually all populated areas in Canada through skywave propagation. 2. Diminished coverage area - it is my understanding that IBOC requires a minimum 1 mV/m for reliable daytime coverage. As a result, the effective IBOC coverage for AM would tend to be significantly less than for standard FM broadcasting. One of AM radio's greatest strengths is its capability for regional groundwave coverage, as well as moderately reliable nighttime skywave service. It would appear to be a step backward for say a 25kW AM station with a reliable daytime groundwave coverage [rural service, 0.5 mV/m contour] of 100 miles to only be able to provide satisfactory IBOC service to a radius of 20 miles, while a Class B FM station operating at full Class B parameters may be providing a coverage radius of 40 miles [0.5 mV/m contour]. 3. Diminished audio fidelity - it is my understanding that the utilization of the IBOC AM system would result in a maximum audio bandwidth of 4.5 kHz using the conventional analogue system. While it is true that many AM receivers have a 6dB point located at 3 kHz, many of these receivers offer a gradual sloping response beyond 3 kHz and beyond 4.5 kHz audio bandwidth. In addition, it is common practice for many AM listeners to 'offset tune' conventional dial tuning receivers - for example - to 583 kHz to receive a station on 580 kHz. This 'offset tuning' often allows reception of audio well beyond 6 kHz of audio bandwidth - even at the 6 dB point. Some digital tuning receivers, primarily world band portables, allow tuning in 1 kHz increments. I have personally utilized this technique with various receivers made by Sangean, Sony, Grundig and other manufacturers to extend audio response well beyond 3 kHz, up to a 6 dB point at 6 kHz, with 20 dB point response well beyond 6 kHz. In addition, some manufacturers, such as Philips, are now manufacturing popularly priced digital tuning receivers which offer audio fidelity well beyond 3 kHz and beyond 4.5 kHz. A recent test on a Philips boombox purchased at Walmart for \$88.00 CDN resulted in audio response up to 5.3 kHz at the 6 dB points, with response up to 8.4 kHz at the 20 dB point. The imposition of an audio frequency response limit of 4.5 kHz would deprive millions of AM listeners of good musically fidelity for music listening, and truly lifelike reproduction of spoken word programming. 4. AM IBOC would be incompatible with stereo broadcasting. The bandwidth is not wide enough to permit stereo IBOC broadcasting on the standard AM band. Worse still, it would prevent CQUAM analogue AM stereo broadcasting.

The best solution for a rejuvenated AM band is: A. A renewed commitment to CQUAM AM Stereo and the NSRC/AMAX standards. B. Encouragement of digital processing technology on the receiver end [e.g. DSP or Digital Signal Processing] to enhance signal to noise ratio and reduce heterodynes without impairing audio fidelity. Such a receive only system would be backward compatible with existing receivers and would not impair CQUAM AM Stereo. While in many urban markets, AM broadcasting in Canada and the USA is utilized for spoken word formats, it is also used for many specialty music formats. Further, the value of AM broadcasting for primarily music formats is especially great for the coverage of large rural areas, and areas of hilly terrain, where mere line of sight transmission is not feasible.

Thank you for the opportunity to respond on this matter of USA broadcasting policy which has international implications.

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